function S = gen\_scheme\_unif(L,P) % L - length of the generated sparse vector, P - percentage of "1" in the vector

nr = int32(L\*P\*0.01);

nus = zeros(1,L);

k=1;

while (k<=nr)

c = "no";

while ( c == "no")

X = int32(unifrnd(1,L));

if (nus(X) == 0)

nus(X) = 1;

c = "ok";

endif

endwhile

k++;

endwhile

S=nus;